

Professional and Managerial Branch  
Engineering Group  
Registered Engineer Series

INDUSTRIAL ENGINEERING ASSOCIATE II \*

09/89

#### CHARACTERISTICS OF THE CLASS:

Under general supervision, performs a variety of industrial engineering functions to maximize efficient and effective utilization of personnel, equipment, and facilities; may supervise other engineering, technical, and clerical personnel engaged in departmental management and operations; performs other duties as required.

#### EXAMPLES OF DUTIES:

Analyzes departmental functions and operations and related information collection, processing, and distribution requirements; designs and implements automated management information systems to manage departmental functions; trains personnel in system use and provides consultation in system operation and maintenance.

Performs specific studies of industrial operations including design of study program, identification of operating parameters, identification of information requirements, information analysis and formulation of recommendations for improvement of operation under study; participates in planning for and monitoring of specific industrial operations; conducts sample observations to develop standards of manpower and equipment utilization.

Analyzes requirements for land, facilities and equipment; participates in planning and site layout of shops, yards, and work areas to maximize functional efficiency; performs incidental drafting and design functions such as site or facility layouts and equipment design; reviews engineering drawings and specifications for industrial facilities; prepares cost estimates for industrial facilities.

Assists safety management personnel in conducting safety surveys and implementation of safe industrial work sites and procedures; maintains surveillance of specific safety issues such as lost time accidents and procedures for improving safety performance; maintains surveillance of and participates in management of special industrial operations programs, hazardous material storage and control, and underground storage tanks.

Analyzes functional statements and organizational charts; prepares and reviews equipment specifications; prepares operating and procedural manuals; prepares contract specifications for industrial services of new or improved types.

#### MINIMUM QUALIFICATIONS:

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Industrial Engineering and two years of professional industrial engineering experience; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Good knowledge of the principles and practices of industrial engineering; good knowledge of the methods, machines, tools and equipment used in departmental operations; good knowledge of the use and care of personal computers, associated peripherals and applications software; good knowledge of cost determination techniques; good knowledge of safe working practices and procedures; some knowledge of federal, state and local laws, codes, ordinances, and personnel regulations as they apply to departmental operations.

Ability to prepare and interpret plans, designs, and specifications; ability to supervise, train, and evaluate assigned personnel; ability to determine project costs; ability to express oneself clearly and concisely, both orally and in writing; ability to establish and maintain effective working relationships with fellow employees and the general public; ability to maintain records and prepare reports; ability to plan and organize research studies.

Physical Requirements: Mobility within an office and field environment; ability to operate a motor vehicle through city traffic.

Special Requirements: Subject to on-call during non-working hours and mandatory overtime during periods of Public Works Emergency Operations.

Licenses and Certificates: Texas Class "C" Driver's License or equivalent license issued by another state.

\* The title of Industrial Engineer II can be used provided registration as a Professional Engineer in the State of Texas has been obtained.

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Director of Personnel

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Department Head

**OFFICIAL**